

# Lebanon Water and Wastewater Sector Support

**QUARTERLY REPORT: JANUARY 2012 — MARCH 2012** 

April, 2012

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#### LEBANON WATER AND WASTEWATER SECTOR SUPPORT

**QUARTERLY REPORT: JANUARY, 2012—MARCH, 2012** 

Program Title: Lebanon Water and Wastewater Sector Support

**Sponsoring USAID** 

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**IRM** Information Resources **ACRONYMS** Management ΙT Information Technology **ACWUA Arab Countries Water Utilities** Association **AFD** French Development Agency Annual Work Plan **AWP APP** Annual Work Plan **IWRM** Integrated Water Resource ATP Annual Training Plan Management **BMLWE** Beirut and Mount Lebanon KPI Key Performance Indicator Water Establishment **LWWSS** Lebanon Water and Wastewater **BWE** Beka'a Water Establishment Sector Support CAS Central Administration of MIS Management Information **Statistics** Ssvtem CCN Coopearting Country National Maintenance Management **MMS** CDG Chairman and Director General System Camp, Dresser and McKee **CDM MOEW** Ministry of Energy and Water Engineering MOF Ministry of Finance Council for Development and **CDR MOTGE** Mise en place des Outils Reconstruction Techniques de Gestion de l'Eau **CRM Customer Relations NLWE** North Lebanon Water Management Establishment CIP Capital Improvement Plan **NRW** Non Revenue Water **USAID Contract Office** CO Operations and Maintenance O&M COA Chart of Accounts **PMP** Performance Monitoring Plan **CQCP** Construction Quality Control **PSP** Private Sector Participation Plan PPP Public Private Partnership **CSR Customer Service SCADA** System Control and Data Representative Acquisition COP Chief of Party South Lebanon Water SLWE COTR Contract Officer Technical Establishment Representative **SMP** Subcontractor Management **Director General** DG Plan DAI Development Alternatives Inc. SOW Scope of Work **DCOP** Deputy Chief of Party STTA Short-Term Technical **EIB** European Investment Bank Assistance EU European Union **TBC** To be confirmed EΑ **Environmental Assessment** TOR Terms of Reference **EDL** Electricite du Liban (National **USAID** United States Agency for Electricity Provider) International Development Environmental Monitoring and **EMMP** USG United States Government Mitigation Plan WE Water Establishment **ERP** Enterprise Resource Plan **WPS** Water Pumping Stations Financial & Accounting System FAS **WWTP** Wastewater Treatment Plant GΑ Geographical Area Geographical Information GIS System GIZ Gezellshaft fur Internatione Zuzammenarbeit GOL Government of Lebanon GTZ German Technical Assistance **HPIP** High Priority Intervention Program HR Human Resources H&S Health and Safety **Initial Assessment Report** IAR Initial Environmental Evaluation **IEE** 

International Financial Institution

International Resource Group

IFI

**IRG** 

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#### **LWWSS Counterparts and Primary Contacts**

Beirut-Mount Lebanon Water Establishment (BMLWE)
Beka'a Valley Water Establishment (BWE)
North Lebanon Water Establishment (NLWE)
South Lebanon Water Establishment (SLWE)
Ministry of Energy and Water
MOEW Advisor to Minister (Water)
MOEW Advisor to Minister (Wastewater)

Joseph Nseir Maroun Msallem Jamal Krayem Ahmed Nizzam Ghassan Beydoun Abdo Tayar Randa Nemer

#### A. INTRODUCTION

The Lebanon Water and Wastewater Sector Support (LWWSS) Program is a \$34 million, 67-month (October 2009 - April 2015) program funded by USAID and implemented by Development Alternatives, Inc. (DAI). LWWSS provides technical assistance and related services to impact USAID/Lebanon's Assistance Objective (AO) 4 - "Improved water services for all in Lebanon" - and the corresponding Intermediate Results (IRs) - more efficient management of water resources, improved water infrastructure, and enhanced water governance.

LWWSS works in cooperation with the Ministry of Energy and Water (MOEW) to assist Lebanon's four Water Establishments (WEs) in strengthening their capacity to deliver high-quality and sustainable services. Ultimately, the LWWSS program aims to help the Water WEs advance towards financial and operational sustainability and overcome the many challenges they face, including staff shortages and an aging workforce, poor customer relations, low tariffs that fail to recover operating costs, lack of metering, excessive non-revenue water, and underinvestment in the water and wastewater infrastructure.

The areas of focus that LWWSS targets in working with the WEs include:

- · Building management capacity within the WEs;
- Increasing financial management capacity and financial systems integration;
- Procuring equipment to complement technical assistance and capacity building;
- Business planning to increase capital planning and benchmarking capacity;
- Funding urgent infrastructure works to enhance delivery or access and coverage;
- Developing a corporate culture, customer service orientation and public outreach programs.

Based on the initial LWWSS program objectives of building on previous USAID and other donor program progress and as a result of lessons learned during the first two years of the program, LWWSS has focused on implementing its Year-Three Work Plan within specific areas of Water Establishment (WE) operations. The LWWSS program has therefore tailored the individual WE work plans to apply the information gathered on each WE and to leverage the successes accomplished to date.

This Quarterly Report covers the period from January, 2012 – March, 2012 and provides quarterly highlights, component updates that provide technical perspective, and then details progress of project activities broken down by each Water Establishment and then further by each component, as per the Year-Three Work Plan. Each component consists of several activities, and progress of each is depicted in the accompanying Gantt charts (with mention of the percentage of completion as of the end of March) and detailed in the narrative. Additionally, this quarterly report includes the preliminary PMP tables that report progress on the indicators for the first half of year three of the project.

#### **B. QUARTERLY ACTIVITY HIGHLIGHTS**

#### Training for Beka'a Water Utility Staff Instills New Customer Service Culture

"Customer service is the base of what we do – our utmost goal is to serve our customers."

-Maroun Moussalem, Beka'a Water Establishment Director General



BWE Customer Service personnel with Abbas Moussawi, Head of BWE Human Resources Department and Joseph Lteif, Head of the BWE Customer Relations Department



Group photo on the final day of the BWE customer service management training in Zahle

Interviews conducted by LWWSS in 2010 indicated that 6 in 10 people in the Beka'a Valley are not satisfied with the quantity and quality of water they receive from their water utility, the Beka'a Water Establishment (BWE). In the same survey, 8 in 10 people indicated that they were not satisfied with the timeliness and effectiveness of the customer service they receive when calling the BWE with questions or complaints.

This lack of satisfaction with services and lack of trust in the WE becomes a chicken-and-egg scenario: which comes first, revenue or service enhancement? Indeed, while 65 percent of the population subscribes to BWE services, only 3 in 10 customers actually pay their water bills. The resulting lack of revenue for the BWE perpetuates their inability to cover operating and maintenance costs. This situation then causes the initial problem expressed by customers – that the quantity and quality of water service is unsatisfactory. It becomes a quandary for any utility – how to generate sufficient revenue in order to assure the desired service levels.

As a critical step in breaking this cycle, the WE must establish trust and confidence in their consumers by improving their customer service system, which is the essential image of the WE. To address this need, LWWSS conducted a customer service management training for 23 BWE customer service personnel from January 31 to February 2 as part of on-going capacity building with the BWE.

Over a series of five modules, the training covered the general management procedures and best practices of a customer service department including: developing excellent and effective communication with customers; problem solving skills; tracking complaints; and following up with customers in a timely manner. The final day of training was dedicated to inaugurating the use of nine standardized service request forms, a first for the WE. These forms cover subscription applications and requests for upgrades and cancellations, all developed over several months by LWWSS in close collaboration with the BWE.

The training sought to instill a customer service culture, which will lead to increased subscriber satisfaction and increased collection rates, which will contributing to financial sustainability of the WE.

### LWWSS Upgrades Water Analysis Laboratories in South Lebanon as a Major Step in Monitoring Water Quality

# Approximately 677,270 people will have improved quality of water



LWWSS engineer Bassem Ghayda reviewing safety procedures with SLWE laboratory technician Malak Neemeh



Atomic Absorption Spectrophotometer training at Saida water analysis laboratory from March 5-9, 2012



SLWE Laboratory Personnel and SLWE Director General Ahmad Nizzam

In early March, 2012, LWWSS completed an upgrade of the South Lebanon Water Establishment (SLWE)'s three water analysis laboratories in order to strengthen SLWE's capacity to enhance and monitor water quality. The upgrade included the purchase of water quality testing equipment and intensive training of 14 laboratory personnel. This activity affects 677,270 people, the population served by the SLWE, as the quality of water from all water sources managed by SLWE will be tested and monitored at one of these three laboratories.

The equipment purchased for the water analysis laboratories will enable the WE to employ different test methods for water quality assessment, providing the baseline information on microbiological, chemical, and physical hazards in the water that could pose risks to health. This equipment also allows for continuous monitoring, which is essential for water quality management.

Among the new equipment installed in the Saida laboratory was an Atomic Absorption Spectrophotometer, an advanced method of water quality monitoring that determines heavy metals such as mercury and arsenic in water samples. The equipment was delivered in February, 2012, and the vendor conducted a 5-day training from March 5-9, 2012.

This activity answers an urgent need of the WE and contributes to informing the WE about the health risks generated by poor water quality in SLWE. The impacts will include better capacity for the WE to conduct sampling and testing, reporting it regularly to the WE management, the MOEW and other parties (municipalities, ministry of public health, donors). Most importantly, it will enable the WE to have regular systems and processes (including software) that enable it to understand and eventually improve delivered water quality, and to reach out to the population transparently about the water quality testing results.



Group photo at Saida laboratory

#### LWWSS Celebrates World Water Day with Schools in South Lebanon



LWWSS Outreach & Communications Specialist Nada Akl and SLWE Communications Manager Nidal Hachicho introduce World Water Day



SLWE Communications Manager Nidal Hachicho discussing daily water use with kids



Students reading radio advertisements they developed about water conservation

To complement its capacity building activities with the South Lebanon Water Establishment (SLWE), LWWSS implemented an outreach campaign with students to celebrate World Water Day. The campaign included class-based interactive sessions on the water cycle, the water treatment process, daily water consumption, and water conservation.

To kick off the campaign on World Water Day on March 22, LWWSS' Outreach and Communications Specialist Nada Akl led two sessions of approximately 100 students in the Doha School in Saida with the assistance of SLWE's Customer Service and Communications Manager Nidal Hachicho.

During the session, each student is given a comprehensive booklet that includes each lesson depicted verbally and pictorially and several interactive games and activities. One of the activities teaches students how to quantify the amount of water used in one day by a family of four by listing all of the family's daily actions that require water and the amount of water in liters that each action consumes. The students then calculate these figures and are shocked to discover that a family of four uses on average 905 liters of water per day! The activity concludes with a discussion regarding simple ways to reduce daily water consumption. Students are asked to complete the same activity at home detailing their own family's water consumption, to pass on this knowledge of water usage and the essential message regarding water conservation.

This initiative is a joint effort by LWWSS and SLWE, thereby building the image of the WE in the public's eyes and supporting the SLWE in its effort to reach customers. It establishes a relationship between the youth and the water utility, building the capacity of SLWE staff, and spreading the message of water conservation to the public.

LWWSS continued the World Water Day outreach campaign over a period of two weeks in schools in both South Lebanon and North Lebanon, reaching approximately 600 students.



Group photo on World Water Day at Doha School in Saida

#### C. OVERVIEW OF PROGRESS THIS QUARTER

#### **Progress Summary**

#### Infrastructure Work

In the second quarter of year three, LWWSS continued mobilization work to increase staff and provide office space for the additional staff. The space acquired in the first quarter of year three was renovated completed in mid-January. In the second quarter additional equipment and furniture was purchased, additional generator electrical supply arranged for, the computers were connected to the central DAI server, and the Senior Infrastructure Project Manager hired. This new employee began immediately to meet with NLWE officials (with the help of Bassam Jaber), CDR officials and the WE management to gather information concerning the Beit Mellat infrastructure project. He and Bassam Jaber also conducted similar meetings with the Beka'a Valley Director General and staff to gather information concerning the water transmission line replacement infrastructure project. Initially, LWWSS intended to hire one engineering consulting firm to develop the design and specifications of the work for both Beit Mellat and the Beka'a Valley. However, after the initial data review by the Senior Infrastructure Project Manager, LWWSS decided to split the A&E work between two firms because the Beka'a project was simpler and could allow LWWSS to go to construction bid sooner.

In the South Lebanon Water Establishment, CDM Smith has progressed in advertising for and selecting an A&E firm. After selection of the winning A&E bidder, LWWSS began the process of obtaining subcontract approvals from DAI and USAID.

#### **Equipment Procurement and Technical Assistance**

Only general comments will be made in this section. For specific component and WE progress, please see the detailed descriptions and Gantt charts below.

Component Two: Strengthened Capacity for Managerial, Technical and Operational Efficiency

LWWSS carried out training on customer service in the BWE, new laboratory equipment in the BWE and SLWE, as well as observation of World Water Day by providing presentations to grade school students in the BWE.

Component Three: Increased Financial and Commercial Viability and Operational Efficiency

During the second quarter of year three, LWWSS provided training in the BWE for all elements of the FAS (accounting, budgeting, payroll, inventory, procurement) and worked with both the BMLWE and BWE staff in tailoring the new software systems to provide an integrated financial data management system.

Component Four: Increased Capacity in Financial Planning and Project Management

The primary activity under this component carried out in the second quarter was to work with the SLWE in rewriting their business plan to conform to the Ministry of Energy and Water requirement that all plans the WEs produce must take into account of the MOEW national water sector strategy, approved by the Council of Ministers in February, 2012. The new draft business plan was completed by the end March, 2012 and is going through the WE review and board of directors approval process before being sent on to the MOEW for its approval.

Component Five: Provision of Technical Equipment to Improve Water Establishment Performance

During the second quarter substantial progress was made on all major equipment procurements; however, some procurements have encountered delays and the specific situation is described under component five headings below. Additionally, procurement of engineering consulting firm services are included in this component when those services relate to equipment procurement.

Component Six: Implementation of Small- and Medium-Scale Projects to Improve Operations and Services

Specific progress on each of the three infrastructure programs is presented by water establishment below. LWWSS has worked hard to mobilize staff, acquire office space and begin the initial data collection and review for each infrastructure project proposed for each WE (SLWE, NLWE and BWE).

Component Seven: Improved Corporate Culture, Customer Service and Outreach

In addition to the technical assistance and training for improved customer service and continued work on the customer service in Zahle, LWWSS observed World Water Day by meeting with third and fourth graders to present a water conservation program, and award water conservation prizes. For full details, please check the quarterly highlights and the specific activity discussion under component seven.

#### D. PROJECT PROGRESS BY WATER ESTABLISHMENT AND COMPONENT

Project activities are broken down by each Water Establishment and then further by each component, as per the year three Work Plan. Each component consists of several activities and progress of each is depicted in the Gantt charts (with mention of the percentage of completion as of the end of March) and detailed in the narrative.

#### 1. Beka'a Valley Water Establishment (BWE)

#### Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

#### Work Plan Activities

Work F	Plan Activities		_		
Item	Activity Description	Program Resource		Deliverable by End of Year Three	Timeframe
2.2	Building the WEs' Water Quality Management Capacity				
2.2. 1	Conduct water quality baseline survey based on seasonal sampling of all sources, with on-the-job staff training	AUB		Activity Completed. Assessment issued to BWE	May, 2012
2.2. 2	Establish a region-specific and Libnor-compatible testing protocols and methodology	AUB		Activity Completed. Assessment issued to BWE	Sept. 2012
2.2. 3	Plan and conduct a comprehensive user training on all aspects of lab operation	AUB		Activity planned.	Sept. 2012
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance				
2.3. 1	Pump station operators basic O&M and H&S training (70+ staff)	CDM (BG, GT), LWWSS (MK) Kredo		Activity completed in Year Two. Will be repeated in BWE to cover new staff.	Sept. 2012

BG-Bassem Ghayda; MK-May Koleilat; GT-Gulnard Ters

#### Activity 2.2 - Building the BWEs' Water Quality Management Capacity

The water quality assessment and management plan activity being carried out by subcontractor American University of Beirut (AUB) is on track. As of the end of March, AUB finalized the dry season baseline water quality survey of sources

feeding distribution networks and piped water supply to establish a database. Concurrently AUB has been taking wet season samples and will merge the dry and wet season findings into one comprehensive report by the end of May. Using the baseline data as a foundation, AUB will develop a comprehensive water sampling program including collection protocols and laboratory testing protocols for organic and bacterial contaminants. Additionally, AUB will develop laboratory training based on its assessment of laboratory personnel and will recommend procurement of laboratory equipment to meet the GOL water quality standards.

#### **Activity Timeline**

Activity Progress	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Water quality baseline survey completed			75	5%								
Establish testing protocols and methodology					20	%						
Plan and conduct a comprehensive user training on lab operation					20	%						$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Activity continues in Year 4

#### Activity 2.3. - Building Operators' Capacity in Operation and Maintenance of Pump Station Equipment

#### Follow-Up Pump Station Operators Training

In Q3 and Q4 of year three, LWWSS will plan and conduct a follow-up refresher course for pump station operators trained in year two and a course for those newly appointed operators who joined BWE during the last months of 2011. The training needs assessment and course preparation will begin in June as indicated in the Gantt chart below.

#### **Activity Timeline**

Activity Draws on	0	N	D	J	F	М	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Staff interviews, training needs assessment									0	%		
Course preparation							 		0'	%		
Provide course									0	%		

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

#### Component 3: Increase Financial and Commercial Viability of Water Establishments

#### **Work Plan Activities**

Item	Activity Description	Program	Deliverable by	Timeframe
	rioditity 2000ii.plion	Resource	End of Year Three	

3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.1	Build the WE capacity in consolidating and issuing end of year financial reports	EMC (MC), LWWSS (AS) ABA	Information collected Reports produced	March, 2012
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing	EMC (MC), LWWSS (MK)	Training completed Follow-up in place	Feb, 2012
3.1.3	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information collected New COAs and procedures defined	March, 2012
3.1.4	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures defined with the WE	March, 2012
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.2	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.3	Implement intranet system enabling web-browser based etraining, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012
3.2.5	Supply and install time attendance machine and implement administrative and HR measures to increase HR efficiency	EMC (MC, NA), LWWSS (AS) EDM	Core equipment installed with training in Year Two. Two sets of equipment planned for Year Three.	Sept, 2012
3.3	Pilot Stakeholder Exercise to Sustain O&M of USAID WWTP	DAI (SC, BJ)	Assessment report	September, 2012

MC-Mike Chalah; NA-Nada Akl; AS-Ahmad Siddiq; SC-Sam Coxson; BJ-Bassam Jaber

Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

#### Accounting Training and Financial Procedures Revised Schedule

These activities are on-going and implemented by LWWSS' Financial Specialist Mike Chalah, as these activities are a pre-requisite for the implementation of the ERP solutions (see activity 3.2) to enhance the staff's skills in conducting public and commercial accounting and applying contemporary financial practices.

During the second quarter, LWWSS has adjusted its attention, time and presence in the BMLWE based on the fact that their program is closer to the "go live" phase than the BWE. The work with the BMLWE is intense with daily contact between LWWSS staff, finance subcontractor ABA, ERP system provider EDM and BMLWE staff. Although this process is going well, it has been necessary to shift LWWSS efforts away from BWE for a short period of time. Additionally, it has taken longer for the BWE to institute the administrative process changes needed to implement the ERP. This delay in implementation in the BWE does not change the overall schedule of the "go live" application of the ERP in the BWE, which is anticipated by the end of 2012 as the work plan indicates.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Build the WE capacity in consolidating and issuing end of year financial reports			90	<b>)</b> %								
Training in Public Accounting, Finance, Procurement, Auditing			100%									
Define cost centers, create/update chart of accounts, and accounting coding procedures			90%									
Develop procedures for asset and inventory identification, coding and valuation			90%									

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Revised schedule (see narrative for details)

Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems

#### Enterprise Resource Planning System Progress

During this quarter, LWWSS IT Specialist Ahmad Siddik, Financial Specialist Mike Chalah, and Outreach and Customer Service Specialist Nada Akl continued the ERP preparations.

- Mr. Siddik has been coordinating the IT equipment installation (Activity 5.6), which is a necessary prerequisite for the ERP system.
- Mr. Chalah continued his work finalizing the analysis of the purchasing, cash management, human resources and billing and collection sub-modules of the FAS
- Ms. Akl, continued her CRM portion of the ERP work. The trial period for the customer service request forms continued in March (see Activity 7.3) and the finalized forms will be incorporated into the ERP customer relations management module.

#### Time Attendance Machine Installation in Branch Offices

As part of Activity 3.2.5, LWWSS already provided two time attendance machines in the BWE headquarters. Similar machines were procured during March and will be installed in the Zahle branch and the Baalbeck branch in quarter three of this work plan year. This installation is critical to modernizing the human resource and financial operations in the WE by obtaining automatic logging of hours and by providing the senior management with tools to enforce staff attendance.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Implement software platform including FAS and CRM solutions			50	%								
Implement intranet system enabling web-browser based e-training						0%						
Conduct training, assist in transition phase and provide one/two year on site support						0%						$\rightarrow$
Supply and install time attendance machine and implement administrative and HR measures to increase HR efficiency						50%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Activity continues in Year 4

#### Activity 3.3 - Developing Pilot Stakeholder Exercise to Sustain O&M of USAID Wastewater Treatment Plants

During this quarter a draft assessment of the wastewater collection and treatment systems and a draft model services agreement were submitted to USAID for review. The focus of the assessment is the current environment with municipalities of Lebanon collecting sewage, owning and operating the collection system, but the obligation and responsibility of the water establishments to treat wastewater. The report also focused on the sustainability surrounding three USAID-funded wastewater treatment plants because one of the municipalities claimed not to have sufficient funds to operate the plant (despite MOU statements and guarantees to operate the plants). The draft assessment recommends an effort to establish a service agreement between the municipalities and the WEs as a pilot in the absence of current legislation. The service agreement approach is also recommended because it can be undertaken immediately as opposed to waiting for national legislation, which could take many years to become law (the Water Code drafted by the AfD in 2005 has yet to be adopted).

Should the MOEW agree to shift the ownership of the three wastewater treatment plants to the BWE, there still remains a need to address the cost and operation of the sewer collector lines. This, would be part of the year-three and four work plans, should the MOEW agree to the wastewater treatment plant transfer. As of the end of March, the draft assessment report was submitted to USAID for review.

#### **Activity Timeline**

Activity Drawner	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Draft assessment report	100%											
Discuss, amend and issue to USAID						20%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### Component 4: Capital Investment Planning and Program/Project Management

#### **Work Plan Activity**

Item	Activity Description
4.4	Master planning
4.4.1	Water Supply and Sewerage Master plan

Program Resource
Local subcontractor (TBC) Valuadd

Deliverable by End of Year Three	Timeframe
Activity SOW defined. Services procured Planning started	Sept, 2012

#### Activity 4.4 - Developing Water Supply and Sewerage Master plan

LWWSS' subcontractor ValuAdd completed the drafting of the Expression of Interest (EOI) for the Master Planning activity in BWE. LWWSS will be launching the EOI in Apri,I and the RFP will be issued to short-listed firms in May. The EOI issuance was briefly delayed due to last-minute discussions with BWE management that revolved around inclusion of the irrigation sub-sector within the scope of this activity. LWWSS has therefore discussed with BWE the benefits and challenges of including irrigation within the master planning activity and made minor changes to the EOI (and to the forthcoming RFP) to include some basic assessments and recommendations for the irrigation sub-sector. These amendments will contribute to a more accurate analysis of the water and wastewater sector's master plan, while addressing the critical need for the comprehensive master plan to acknowledge and investigate irrigation.

**Activity Timeline** 

Activity Progress	0	N	D	J	F	M	Α	M	J	J	Α	S
	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Draft and issue EOI for master planning subcontractor					80	<b>1</b> %						
Evaluate RFPs and develop RFP shortlist							0%					
Issue RFP, receive and evaluate bids									0%			
Appoint master planning subcontractor											0	%

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Revised schedule based on delays described in the narrative

#### Component 5: Procurement of Technical Equipment to Strengthen WEs

#### Work Plan Activities

	Activity Description
5.4	Upgrading the Water Analysis Laboratories

Program Resource	

Deliverable by End of Year Three	Timeframe

5.4.1	Upgrade the water testing laboratories with infrastructure and equipment	AUB Local suppliers	Laboratory Sept, 2012 procurement scheme planned and agreed with BWE
5.4.2	Establish service agreements, and conduct user training programs for the above activities	AUB LWWSS (MK)*	Activity planned Sept, 2012
5.5	Water Treatment and O&M Training		
5.5.1	Install up to 20 UNICEF-supplied chlorinator units; Supply and install safety equipment and gas detection systems	CDM (BG, GT, EH) Sanabel	Installation Completed complete
5.5.2	Training course for operators and year-long service and supply of consumables	CDM (BG, GT, EH), LWWSS (MK) Sanabel	Training Sept, 2012 conducted (done) 1 year service agreement, consumables
5.6	Increase IT Infrastructure Efficiency		
5.6.1	Assess and design IT infrastructure for WE headquarters and connectivity to branches	LWWSS (AS)	Report issued and adopted by SLWE
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches	LWWSS (AS) Local subcontractor (MDS + TBD)	Scope defined Sept, 2012 Procurement and implementation started
5.8	Establishing Direct Customer Interface		
5.8.1	Design branch office and customer service center in WE's premises in Zahle	EMC (NA)*, LWWSS (AS) Boudy Esta Architects	Design complete and approved by WE
5.8.2	Implement interior works and furnish the new customer service center; connect IT systems to head office	Boudy Esta Architects, LWWSS, EMC Al Handassa Constructors	Implementation May, 2012 complete Project handed over to WE
5.8.3	Assist WE in reaching customers and building staff capacity in customer service	EMC (NA) Local subcontractor (TBD)	Activity planned Sept, 2012

BG-Bassen Ghayda; GT-Gulnard Ters; EH-Elie Hreiz

#### <u>Activity 5.4 – Upgrading Water Analysis Laboratories</u>

LWWSS upgraded BWE's laboratories throughout year two and completed this activity in Q1 of year three, but as part of AUB's water quality assessment and management plan (see Activity 2.2), LWWSS will further upgrade the laboratories in Q3 and Q4 of year three.

**Activity Timeline** 

Alexander of the second	0	N	D	J	F	М	Α	М	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Based on water quality mapping, investigate and plan laboratory equipment needs									0%			
Start procurement										0	%	$\rightarrow$
Establish service agreements, and conduct user training programs for the above activities										0'	%	$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

→ Activity continues in Year 4

#### Activity 5.5 - Water Treatment and O&M Training

#### Chlorination Equipment Follow Up

Throughout this quarter, Sanabel and LWWSS engineers made site visits to the 14 stations where chlorinators were installed to observe operations. In addition, LWWSS' capacity building specialist visited the sites to determine if the operators who were trained retained the information from the trainings, if they had any questions or concerns about operating the systems, and if they needed additional training. During these meetings and in questionnaires that were distributed, the majority of the operators requested a refresher course and a simplification of the training. While the comprehensive operations and maintenance (O&M) manuals are available for their reference, the operators noted that they prefer to have simplified guides that they can use as a quick reference during their daily rounds.

In response to their requests, LWWSS developed simplified, illustrated guides for operating the chlorinators and a daily step-by-step checklist to assist them. These guides and checklists are now available next to each of the chlorination stations, and will be useful for current operators and when training new operators.



Kaa Al Rim station operator Rida Abu Hamdan conducts the daily residual chlorine test



Daily checklist developed by LWWSS to facilitate operating the chlorination equipment



LWWSS Capacity Building Specialist reviewing step-by-step checklist with BWE staff

**Activity Timeline** 

Activity Droggo	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Ongoing training and follow- up with operators				40	)%							
Provide consumables				40	)%							

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### Activity 5.6 - Increasing IT Infrastructure Efficiency

During this quarter LWWSS worked closely with the BWE to determine how to provide the power for the IT equipment procured in the earlier quarter in anticipation of the ERP software installation and application process. It was finally agreed that the new equipment would be supplied by a subscription to an existing generator system as opposed to procurement of the BWE's own IT equipment.

As a prerequisite to the ERP platform, LWWSS upgraded the IT infrastructure at BWE. This upgrade includes hardware and a robust internet connection that establishes permanent connectivity between the branch offices and the servers at the head office.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Complete procurement of IT equipment required		100%										
Equipment delivery on site					100%							
Install and launch equipment, ahead of programming the ERP platform						25%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### Activity 5.8 - Establishing Direct Customer Contact

#### **BWE Customer Service Center Progress**

The iron security bars, glass doors, and partitions have all been installed. The woodwork including doors, closets, cashier and reception counter are all in place with the exception of two cabinets that will be delivered in April. The lighting was also installed and tested including the testing of all electrical and mechanical works installed. Some pending issues (over and above the contract) include the waterproofing fix and façade works for which LWWSS will seek approval and complete early next quarter.

**Activity Timeline** 

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Commence interior works associated with the branch			90	)%								
Commence procurement of furniture and other associated packages				75	i%							
Finalize and handover branch to WE ahead of launching								0	%			
Provide specialist customer service training to staff											0%	

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Component 6: Small- to Medium-Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

#### **Work Plan Activities**

Item Activity Description Program
Resource Deliverable by
End of Year
Three

6.1	Decreasing Water Losses and Upgrading Existing Networks			
6.1.1	Design network upgrades in Zahle: rehabilitating up to six branch networks	LWWSS (Infrastructure PM) Local Engineering Firm (TBD)	Engineering consultant appointed Design complete	Sept, 2012
6.1.2	Implement network upgrades in Zahle: rehabilitating up to six branch networks	Local Engineering Firm (TBD) Local subcontractor (TBD)	Preparation for procurement started	Sept, 2012

#### Activity 6.1 - Decreasing Water Losses and Upgrading Existing Networks

The activities under component six fall under the infrastructure portion of LWWSS, which began on October 1, 2011. The infrastructure portion of LWWSS' project entails the following:

- Mobilization: acquisition of new office space (in our current building) and refurbishment, furniture and equipment procurement, and recruitment for approved additional positions.
- Engineering consulting firms hired, inspection, data gathering, preliminary design and DAI, stakeholder, and USAID approval
- · Final design approval, advertisement and selection of construction companies
- Subcontract approval of selected construction companies by DAI and USAID
- Construction of project
- Commissioning

The two activities under Component 6 are expanding service provision to non-served areas in Beit Mellat, Akkar for NLWE and rehabilitating branch networks in Zahle for BWE. The launching of these activities has been delayed by approximately three months, mostly due to recruitment of personnel, as the most critical position under component six is the infrastructure project manager.

The infrastructure project manager, Walid Abouzeid, was hired in February and started in March with meetings in the NLWE and BWE. Recruitment for the construction manager started immediately. Given a one-month notice period, it is anticipated that this position will be filled in May.

During March, Mr. Abouzeid met with the Director General of BWE to discuss the branch network rehabilitation activity in Zahle. Preliminary cost estimates of the construction work were made in order to draft the scope of work for the engineering consulting firm. Mr. Abouzeid began work with LWWSS project manager and procurement manager to develop an RFP for the Zahle branch network for the engineering consulting firm.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Hiring of project personnel and conducting detailed technical investigation of project parameters.		50	)%									
Drafting engineering SOW, launching procurement and appointing engineering subcontractor.					60	<b>1</b> %						
Starting the design and the preparation of the procurement of the works.										0%		$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Activity continues in Year 4

#### Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Work F	Plan Activities		
Item	Activity Description	Program Resource	Deliverable by End of Year Timeframe Three
7.2	Customer Service Management Capacity Building		
7.2.1	Customer service training aiming at enhancing service effectiveness and increasing customer satisfaction	EMC (NA) LWWSS (MK)	Training provided March, Follow-up in place 2012
7.3	Develop Tools and Support WEs in Adopting Corporate Communication	EMC (NA) Local subcontractor (TBD)	Activity completed March, 2012
7.3.3	Develop and Adopt Customer Service Application Forms	- EMC (NA) - Local subcontractor (TBD)	- Activity March, completed 2012

#### Activity 7.2 - Customer Service Management Capacity Building

#### **Customer Service Training**

The customer service training for 23 BWE staff was provided by LWWSS specialist Nada Akl for three days from January 31 to February 2. The essence of the customer service training is to prepare the WE staff members to employ contemporary customer service practices as a means of both improving WE staff effectiveness and building a positive relationship between the WE and its customers. The highlight "Training for Beka'a Water Utility Staff Instills New Customer Service Culture" includes more details about this training.

#### Activity 7.3 - Develop tools and Support WEs in Adopting Corporate Communication

#### **Customer Service Application Forms**

The use of the customer service application forms was launched in a pilot format in February. Feedback was received in March and full-scale printing and use by WE staff members of the pilot forms began. However, the review by the director general and staff took longer than anticipated which resulted in about a one month delay for the pilot to be printed. A review of the reforms and their application will take place in April or May to determine if any fine tuning is needed fefore final forms will be officially adopted by the WE.

**Activity Timeline** 

Activity Timonino												
Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Course preparation for customer service training			10	0%								
Customer service training course provision.				100	0%							
Finalize design, obtain WE approval and deploy forms as pilot in branches.			100%									
Obtain final feedback and issue formally, then arrange for printing.						0%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Revised schedule

#### 2. Beirut-Mount Lebanon Water Establishment (BMLWE)

#### Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

There are no component two activities with BMLWE in the year-three work plan.

#### Component 3: Increase Financial and Commercial Viability of Water Establishments

#### **Work Plan Activities**

Item	Activity Description	Resource		
3.1	Upgrade Finance and Accounting Standards and Methods			
3.1. 1	Build the WE capacity in consolidating and issuing end of year financial reports	EMC (MC), LWWSS (AS) ABA	Information collected Reports produced	March, 2012
3.1.	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information collected New COAs and procedures defined	March, 2012
3.1.	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures defined with the WE	March, 2012

3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.	Implement intranet system enabling web-browser based etraining, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2. 4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012

#### Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

These activities are on-going and implemented by LWWSS' Financial Specialist Mike Chalah, IT Services Manager Ahmad Siddik, and ABA subcontractor President, Mr. Ahmad Al Azzam. This phase of the work involves coordinating closely with EDM, the software provider and BMLWE finance staff to tailor the WE's financial and other transactional information into the formats needed by the WE for all of its reporting and decision-making requirements. This quarter saw substantial progress in the tailoring process and trial runs using the tailored software to be sure that the data entered is correct, the processing of the data is correct and the hardware system adequately processes the software. LWWSS anticipates the "go live" phase to be started in May to determine how well the transition has taken place. Once the basic FAS system has been transitioned to, the subsidiary software modules (e.g., Assets, Maintenance, HR) can be tailored and implemented using the same tailoring procedure.

**Activity Timeline** 

Activity Timeline												
Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Build the WE capacity in consolidating and issuing end of year financial reports	90%											
Training in Public Accounting, Finance, Procurement, Auditing			100%									
Define cost centers, create/update chart of accounts, and accounting coding procedures			90%									
Develop procedures for asset and inventory identification, coding and valuation			90%									

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Revised schedule (see narrative for details)

#### Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems

#### Enterprise Resource Planning System Progress

During March, LWWSS IT Specialist Ahmad Siddik, Financial Specialist Mike Chalah, and Outreach and Customer Service Specialist Nada Akl continued the ERP preparations at BMLWE.

Below is a summary of activities and progress during the quarter:

- Meetings with the Director General to discuss the overall ERP progress;
- Frequent meetings with BMLWE implementation team and the EDM team to continue preparations for ERP testing in April and "go live" in May;
- Inform Nizar Najm at the World Bank about the ERP scope, milestones, and progress completion;
- Review and completion of the Navision Functional Requirement Document Review;
- Completion of the Payroll Functional Requirement Document;
- Review of the CRM Functional Requirement Document, which will be finalized in mid-April. The last step is for EDM to send LWWSS the final design document for approval and implementation is planned for June; and
- Review training materials and conduct testing sessions before training.

The first set of testing sessions is scheduled for April 2 – May 9, after which the ERP platform will "go live." The first set of system testing is for the finance, budgeting, purchasing, and warehouse departments. The human resources, customer service, and payroll department tailoring and testing will take place in June, followed by the billing and collection department in September, making a fully functioning ERP system at BMLWE by the end of September 2012. However, continued ERP system performance will be monitored by an embedded EDM specialist until the end of the EDM contract in September, 2013.

#### **Activity Timeline**

Activity rimeline												
Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Implement software platform including FAS and CRM solutions			50	)%								
Implement intranet system enabling web-browser based e-training						0%						
Conduct training, assist in transition phase and provide one/two year on site support						0%						$\rightarrow$
Provide training to senior IT personnel at WE						0%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

→ Activity continues in Year 4

#### Component 4: Capital Investment Planning and Program/Project Management

There are no component four activities with BMLWE in the year-three work plan.

#### Component 5: Procurement of Technical Equipment to Strengthen WEs

#### **Work Plan Activities**

 Item
 Activity Description
 Program
 Deliverable by End of Year
 Timeframe

5.2	Upgrading Pumping and Energy Efficiency
5.2.1	Jeita Pump Station: Design equipment replacement and sand removal unit solution
5.2.2	Jeita Pump Station: Supply 18 pumps and motors (US made), associated valves, fittings and electrical panel boards
5.2.7	Establish service agreements, and conduct user training programs for the above activities

Resource
CDM (BG, GT, EH)
CDM (BG, GT, EH) NPC and other US manufacturers
- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)

Three	
Design Produced and Approved by BMLWE	Completed
Equipment delivered to BMLWE	June, 2012
- Activity planned	September, 2012

Activity 5.2 - Upgrading Pumping and Energy Efficiency

#### Jeita Pump Station Equipment Replacement

Jeita pump station rehabilitation is a cost-share project where the BMLWE is assuming approximately one-half of the total project cost. LWWSS, through its subcontractor CDM, has provided BMLWE with complete design and specifications of the project. BMLWE will construct the sand removal unit and install it as well as make some pump station building renovations and install the new pumps and motors and related equipment procured by LWWSS (fittings and valves, motor control centers and the pumps and motor units). The order of installation is that the sand removal unit (currently being constructed by BMLWE) will be installed and in place prior to the installation of the pumps and motors. Installation of the pumps and motors follows the following procedure, the fittings and valves are installed first, then the motor control centers and all related electrical works, then the pumps and motors are installed last. However, the pumps and motors may be received earlier than the valves and fittings or the motor control centers which would require LWWSS to warehouse them until the other parts are received. One reason that LWWSS would warehouse the motor and pumps, or other parts of the system, would be to make sure that BMLWE has accomplished the part of the design provided by LWWSS that help ensure the total design work effectively (for example, the sand removal unit must be fabricated and installed). The progress below provides a clear picture of where we are at the end of the second quarter of year three.

#### 1. Pumps, Motors and Valves

Consent to procure the pumps and motors was received in October and an order was placed with the winning bidder, NPC. The manufacturing and shipping is anticipated to take 26 weeks, which would have the pumps and motors arriving in Lebanon in May, 2012.

During November the bids for valves, flanges and fittings were received. And the request for consent to procure was sent to the USAID contracting office. One concern that LWWSS has is the longer production time for the high-pressure valves for the motors, pumps and motor control systems for Jeita.

#### 2. Motor Control Centers

The motor control centers tender has been conducted and a successful local source bidder, Contracom International, was selected. The USAID contracting office has approved the subcontract (contract is February 1, 2012 to July 31, 2012) and LWWSS placed the order for the motor control centers. Contracom has produced the shop drawings and CDM has approved them. Contracom has begun the manufacturing process. This procurement activity will be completed in June, 2012.

#### 3. Valves and Fittings Procurement

The process of bidding the valves and fittings locally required a two step process where the valves would be procured first (and meeting all EU standards) then the specifications for the fittings could be developed and

procured to ensure exact meshing of the bolt holes because of the high pressure nature of the valve and fitting operation (up to 900 pounds per square inch pressure). LWWSS has received the bids by local bidders (Geobaco, Modon Group, SACom) and selected Geobaco as the successful bidder.

#### **Activity**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Complete procurement and place orders on pumps and motors		100%										
Manufacturing and delivery of pumps (ahead of installation by BMLWE)					60%							
Procurement, manufacturing and delivery of valves (ahead of installation by BMLWE)					40%							
Procurement, manufacturing and delivery of electrical panels (ahead of installation by BMLWE)					30%							
Procurement, manufacturing and delivery of fittings (ahead of installation by BMLWE)						10%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### **Timeline**

# Component 6: Small- to Medium-Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

There are no component six activities with BMLWE in the year-three work plan.

#### Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

#### **Work Plan Activity**

Item	Activity Description
7.2	Customer Service Management Capacity Building
7.2.1	Customer service training aiming at enhancing service effectiveness and increasing customer satisfaction

Program Resource
EMC (NA) LWWSS (MK)

Deliverable by End of Year Three	Timeframe
Training provided Follow-up in place	July, 2012

#### 7.2 - Customer Service Management Capacity Building

During the second quarter of year three, LWWSS met with BMLWE senior staff in the customer service department to map out a customer relations training plan that is also coordinated with training that GIZ plans to provide. While the GIZ customer service planning will cover only a few department heads and supervisors in the customer service department, LWWSS will be going into much more depth in training the customer representative employees.

#### **Activity Timeline**

Activity Progress	0	N	D	J	F	M	Α	M	J	J	Α	S
	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Course preparation for customer service training					30	1%						
Customer service training course provision.									0%			

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

#### 3. North Lebanon Water Establishment (NLWE)

#### Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

#### Work Plan Activity

Ite	em	Activity Description
2	.3	Build Pump Stations Operators Capacity in Operation and Maintenance
2	2.3.	Pump station operators advanced training in O&M

Program Resource
- DAI (MK) - Kredo

Deliverable by End of Year Three	Timeframe
<ul><li>Activity</li><li>completed</li><li>Follow-on in</li><li>place</li></ul>	Sept, 2012

Activity 2.3 - Building Operators' Capacity in Operation and Maintenance of Pump Station Equipment

#### Advanced Pump Station Operators Training

The basic pump station O&M training that took place in year two was successful and resulted in a recommendation by both trainees and NL WE management for LWWSS to pursue a more advanced training. Toward this end, LWWSS and the pump station operations and maintenance training subcontractor KREDO met to begin the advanced training process. KREDO will develop training materials for LWWSS approval and then, with NLWE department heads, determine which pump station operators should receive the training. The training is anticipated to be carried out in the next quarter.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012		A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Staff interviews, training needs assessment						50%						
Course preparation							0%					
Provide course								0%				

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

#### Component 3: Increase Financial and Commercial Viability of Water Establishments

#### **Work Plan Activities**

WOLK	Plan Activities					
Item	Activity Description	etivity Description Program Resource				
3.1	Upgrade Finance and Accounting Standards and Methods					
3.1.	Training in Public Accounting, Finance, Procurement, Auditing	EMC (MC)*, LWWSS (MK)	Training Sept, 2012 completed Follow-up in place			
3.1. 3	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information Sept, 2012 collected New COAs and procedures defined			
3.1. 4	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures Sept, 2012 defined with the WE			

#### Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

Mike Chalah worked with NLWE staff to define the process needed to establish a new analytical accounting system. The term "analytical accounting" essentially refers to cost accounting and the process of setting up, or in the case of the NLWE, a realignment and expansion of the cost centers to better determine the occurrence and profile of costs by middle and upper management. Due to ERP obligations in BMLWE and BWE, Mr. Chalah will work on this assessment starting later in the work plan year.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Training in Public Accounting, Finance, Procurement, Auditing							0%					
Define cost centers, create/update chart of accounts, and accounting coding procedures							0%					
Develop procedures for asset and inventory identification, coding and valuation							0%					

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

#### Component 4: Capital Investment Planning and Program/Project Management

There are no component four activities with the NLWE in the year-three work plan.

#### Component 5: Procurement of Technical Equipment to Strengthen WEs

#### **Work Plan Activities**

Item	Activity Description
5.2	Upgrading Pumping and Energy Efficiency
5.2.1	NLWE: Test and design the replacement up to 20 submersible pumps, motors and other works in up to 15 stations
5.2.2	NLWE: Supply and install the replacement of up to 20 submersible pumps, motors and other works in up to 15 stations
5.2.7	Establish service agreements, and conduct user training programs for the above activities
5.3	Increasing Supply Hours to Areas Facing Supply Shortage
5.3.1	Supply and install up to 9 back- up generators for key NLWE stations

Program Resource
- CDM (BG, GT, EH) - Local subcontractor (TBD)
- CDM (BG, GT, EH) - Local subcontractor (TBD)
- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)
CDM (BG, GT, EH) Local subcontractor

Deliverable by End of Year Three	Timeframe
- Procurement started	Sept, 2012
- Activity planned	Sept, 2012
- Activity planned	Sept, 2012
Procurement complete Manufacturing complete	Sept, 2012

		(TBD)		
5.3.2	Establish service agreements and conduct user training program for these generators	CDM (BG, GT, EH), LWWSS (MK) Local subcontractor (TBD)	Activity planned	Sept, 2012

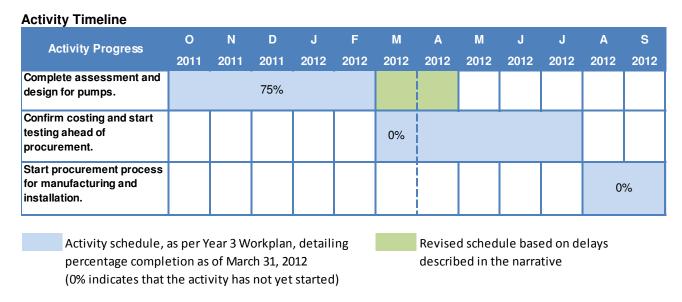
Activity 5.2 - Upgrading Pumping and Energy Efficiency

#### Rehabilitation of Pump Stations

CDM's detailed investigation of the pump station well data revealed substantial lack of information in NLWE relating to the performance of the pumps and wells within most of the stations selected by NLWE to receive new pumps. During March, CDM continued a detailed site survey to refine the shortlist of preferred locations where LWWSS can confidently conduct equipment replacement with minimal additional testing.

Since money for both generators and new submersible pumps is fixed, it was necessary to arrive at the correct mix of generators and submersible pumps. LWWSS had, based on earlier CDM generator site investigation, design and specification development, received bids on nine generators. However, one of the generators was dropped from the list because the site would not be prepared by NLWE for some time. With the cost of the eight generators as a given and an estimate of the cost of the submersible pumps, LWWSS plans to request the NLWE to prioritize the number of generators and the number of pumps so that LWWSS can proceed with the generator purchase and begin the well testing for those sites selected for a new submersible pump. This process is somewhat simplified because of the original 18 submersible pump request, five are really booster pumps and do not require a well test or CCTV scan of the well casing.

During the next quarter, LWWSS plans to complete the prioritization, complete the generator set procurement, begin installation of the generators and begin any well testing needed for new submersible pumps. The process of determining the mix of generator sets and submersible pumps has caused a delay in our presumed schedule of approximately two months. While this delay is not crucial, it will cause some pressure on the well testing and CCTV inspections as well as submersible pump procurement and installation. LWWSS will continue to monitor the progress and discuss the delay and progress and discuss with the USAID and NLWE whether there should be a change in procurement priority.



Activity 5.3 - Increasing Supply Hours to Areas Facing Supply Shortage

#### Back-up Generators for Key Stations

As mentioned above, stand-by generation for nine locations was reviewed, design and specifications developed and bids received by LWWSS during this quarter and part of the previous quarter. However, it is necessary to reach an agreement with the NLWE what the number of generator sets and submersible pumps should be. Once this is done, LWWSS will proceed with the generator procurement.

**Activity Timeline** 

	0	N	D	J	F	M	A	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Complete assessment and design for generators.		100%										
Confirm costing and start procurement process.					90%							
Place procurement orders for manufacturing and installation.										0%		

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

# Component 6: Small- to Medium-Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

#### **Work Plan Activities**

WOIKI	Tall Activities			
Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
6.2	<b>Expanding Service Provision</b> to Non-Served Areas			
6.2.1	Beit Mellat, Akkar, North Lebanon: Design metered house connections to up to 18 villages	LWWSS (Infrastructure PM) Local Engineering Firm (TBD)	Scope defined, consultant appointed Engineering services started.	Sept, 2012
6.2.2	Beit Mellat, Akkar, North Lebanon: Implement house connections to up to 18 villages	Local Engineering Firm (TBD) Local subcontractor (TBD)	Preparation for procurement started	Sept, 2012
6.2.3	Beit Mellat, Akkar, North Lebanon: Build WE capacity in increasing customer base and implementing consumer metering	Local Engineering Firm (TBD) LWWSS (infrastructure PM)	Activity planned	Sept, 2012

#### Activity 6.1 - Decreasing Water Losses and Upgrading Existing Networks

The activities under component six fall within the infrastructure portion of LWWSS, which began on October 1, 2011. The infrastructure portion of LWWSS' project entails the following:

• Mobilization: acquisition of new office space (in our current building) and refurbishment, furniture and equipment procurement, and recruitment for approved additional positions.

- Engineering consulting firms hired, inspection, data gathering, preliminary design and DAI, stakeholder, and USAID approval
- Final design approval, advertisement and selection of construction companies
- Subcontract approval of selected construction companies by DAI and USAID
- Construction of project
- Commissioning

The recruitment for personnel under this activity has been delayed approximately three months due to the difficulty in recruiting engineering personnel who meet the minimum requirements yet fit within the CCN salary scale. Finding an individual with specific skills and experience relative to water system construction required a longer review time. Mr. Walid Abouzeid was hired in February and began work in March, 2012.

During March, Mr. Abouzeid met with the NLWE Director General and staff to discuss the Beit Mellat project and will meet with CDR's Dr. Youssef Karam in early April. Mr. Abouzeid also began review of the design and survey prepared by GIZ.

#### **Activity Timeline**

Activity Progress	0	N	D	J	F	M	Α	M	J	J	Α	S
,	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Hiring of project personnel and conducting detailed technical investigation of project parameters.			60	%								
Data gathering, drafting engineering SOW, launching procurement and appointing engineering subcontractor.								20%				
Starting the design and the preparation of the procurement of the works.												$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

→ Activity continues in Year 4

#### Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

#### **Work Plan Activities**

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
7.3	Develop Tools and Support WEs in Adopting Corporate Communication			
7.3.2	Design and Implement WE Corporate Website	EMC (NA), Local subcontractor (TBD)	Activity completed	Sept, 2012
7.6	Consumer-Targeted Awareness Programs: World Water Day, Water Quality,			

	Conservation			
7.6.2	Water awareness campaigns on 2012 World Water Day	EMC (NA) Local subcontractor (TBD)	Activity completed April, 2012	

Activity 7.3 - Designing and Implementing WE Corporate Website

#### **Brand Identity Guidelines**

After NLWE sent their final comments to LWWSS and amendments made, the NLWE Director General and Communications Manager Hala Habbouchi approved the guidelines. In March the finalized version of the guidelines in three languages was printed and distributed (English, French and Arabic).

#### Corporate Website

This activity will be undertaken in the next quarter.

**Activity Timeline** 

Activity Timeline	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Obtain approval on corporate guidelines, thereby enabling website design to start.					100%							
Appoint web design subcontractor and start design and implementation process.						0%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

#### Activity 7.6 - Implementing Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation

Nada Akl implemented an outreach campaign around World Water Day on March 23, 2012 at the Lycee Francais in Koura for 50 students in coordination with NLWE's Communications Manager Hala Habbouchi. Outreach activities are planned for three more schools in April: Stelie Orthodox (Tripoli), Sainte Famille Maronite (Tripoli), and Chouweifat (Koura).

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012		A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Identify target audience, prepare awareness material and brief all stakeholders.					100%							
Conduct interactive activity, record impacts and report to USAID.						70%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### 4. South Lebanon Water Establishment (SLWE)

#### Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

#### **Work Plan Activities**

Item	Activity Description
2.2	Establishing and Building the Capacity of Metering Teams
2.2. 1	Assist in identifying metering teams and assess training needs
2.2. 2	Provide management team and field team training on metering
2.2.	Provide technical assistance (studies, training, study tours) and/or technological tools for water demand management

Program Resource
- CDM (BG, GT, EH) - DAI (MK) - ValuAdd
- CDM (BG, GT, EH) - DAI (MK)
- DAI (TBD) - ValuAdd

Deliverable by End of Year Three	Timeframe
<ul> <li>Assessment conducted, recommendations issued to WE</li> </ul>	Sep, 2012
<ul><li>Training planned</li><li>Scope of Work defined</li></ul>	Sep, 2012
- Activity planned	Sep, 2012

#### Activity 2.1 – Establishing and Building the Capacity of Metering Teams

The Work Plan shows that this activity will start in the second half of year three. However, DAI will postpone action on this activity by a minimum of six months, to enable the source metering procurement activity (activity 5.1) to progress on site in terms of meter procurement and installation. This sequencing is necessary given that activity 2.1 is a follow-up to activity 5.1. The establishing and training of metering teams (activity 2.1) is closely associated with the ongoing meter installation (activity 5.1) assigned to DAI's subcontractor Modon Group (as of May 2012) given that the drafting of a metering strategy, the assignment of teams and their training must be related to the actual metering infrastructure that awaits installation by Modon Group. As such, the Year Three Work Plan will be updated to reflect the postponement of Activity 2.1 until such time as the Activity 5.1 has progressed by approximately 50%.

#### **Activity Timeline**

This activity has been postponed until year four. The Y3 Work Plan will be updated to reflect this amendment.

#### Component 3: Increase Financial and Commercial Viability of Water Establishments

#### **Work Plan Activities**

Item	Activity Description	Program Resource	Deliverable by End of Year	Timeframe
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems		Three	
3.2.	Update software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.	Implement intranet system enabling web-browser based etraining, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2. 4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012

Activity 3.2 - Integrate the WE's Financial, Accounting, Customer Service and Business Process Systems

Progress and findings over the first half of year three led LWWSS to the conclusion that activity 3.2 must be suspended. Research over the first months of Year Three found that the current service provider for JD-Edwards in Lebanon (iTech) has exclusive rights to the maintenance, repair and upgrade of the JD-Edwards systems, and that iTech is the owner of the programming script used in JD-Edwards in SLWE. As such, LWWSS' plans to identify service providers who can compete for enhancing the platform in SLWE cannot be achieved. Further, LWWSS found that SLWE and iTech are currently in the process of resolving contractual matters between the two institutions, and as such, LWWSS is unable to commit to undertaking any immediate enhancements through iTech in SLWE. The LWWSS program is trying to mitigate and assist with the conflict resolution between the two institutions, but we are unable to guarantee that these matters will be resolved in the remaining months of year three.

LWWSS, however, is still proceeding with the hardware upgrades of the servers that host the JD-Edwards system (activity 5.6). This upgrade will accelerate the operation of the system, pending the implementation of the needed enhancements. Based on the above, LWWSS will withhold any financial commitment under activity 3.2 until such time as contract issues between SLWE and iTech are resolved.

#### **Activity Timeline**

This activity has been postponed until year four. The Y3 Work Plan will be updated to reflect this amendment.

#### Component 4: Capital Investment Planning and Program/Project Management

#### Work Plan Activities

	TOUTHUO			
Item	Description	Program Resource	Deliverable by end of Year Three	Deliverable Timeframe
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4.1	Increase Capacity in Business Planning, Capital Investment Planning and Benchmarking			
4.1.1	Capacity building in planning and updating 5-year business plans, benchmarking and performance monitoring	- ValuAdd - EMC (MC)	- Business plan prepared, issued to WE - Follow-up in place	May, 2012
4.2	Implement Asset Survey, Inventory and Valuation			
4.2.1	Pump-station inventory and valuation, in a format that is ready for integration into FAS, MMS and GIS	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012
4.2.2	Pump station equipment replacement packages for bidding by BWE	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012
4.2.3	O&M training needs assessment for pump-station operators	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012

Activity 4.1 - Increase Capacity in Business Planning, Capital Investment Planning and Benchmarking

#### Five-Year Business Plan Update

LWWSS has undertaken an update of the SLWE five-year business plan to include amendments that take into account the recently adopted MOEW National Water Sector Strategy (NWSS). Areas such as projected performance indicators will conform to the NWSS. Capital planning and manpower will also include any relevant aspects of the NWSS. The amendment was originally anticipated to be completed in December for submission to the SLWE Board of Directors in January. However, due to the holiday schedules at the WE, this schedule was shifted one month later. There is no negative impact on the overall business plan development program by the delay.

#### Activity 4.2 - Implementing Asset Inventory and Valuation

#### Detailed Pump Station Survey and Technical Assessment

LWWSS' subcontractor CADRES is progressing with this activity and has completed the assessment of 140 pump stations out of a total of 206. CADRES is expected to complete the survey by the end of May.

#### **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Final Business Plan Issued		90%										
Pump-station inventory and valuation, in a format that is ready for integration into FAS, MMS and GIS.		50%										
Pump station equipment replacement packages for bidding by BWE.		50%										
O&M training needs assessment for pump-station operators.		50%										

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

# Component 5: Procurement of Technical Equipment to Strengthen WEs

#### **Work Plan Activities**

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
5.1	Identifying Water Production and Contributing to Water Demand Management			
5.1.1	Supply and install up to 218 production meters, fittings and protection box/manhole (all nonmetered sources in WE)	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Orders placed, installation started	Sep, 2012
5.4	Upgrading Water Analysis Laboratories			
5.4.1	Upgrade the water testing laboratories with infrastructure and equipment	- AUB - Local suppliers	- Activity completed	Sep, 2012
5.4.2	Establish service agreements, and conduct user training programs for the above activities	- AUB - DAI (MK)	- Activity planned	Sep, 2012
5.6	Increase IT Infrastructure Efficiency			
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches	- DAI (AS) - Local subcontractor (MDS + TBD)	<ul> <li>Scope defined</li> <li>Procurement and implementation started</li> </ul>	Sep, 2012

Activity 5.1 - Identifying Water Production

# Source Metering

This project activity has been delayed approximately three months due to the difficulty in getting local bidders to meet US bidding standards, standards that allow CDM and DAI to determine whether the bids can be compared with each other and that the specifications required will be met.

While the delay has not and is not expected to impact DAI's ability to get the project done, LWWSS found that some Lebanese vendors and contractors operate much more loosely than is acceptable for our project procurements and infrastructure works. For example, in the first round of bids received, some of the bids did not state the specific equipment

that would be provided, thus, making it impossible to tell if the vendor would actually meet the stated specifications. Under this circumstance, it made it impossible for LWWSS to accept such bids. While the second round of bids did go further in providing information, it was still necessary for LWWSS to ask for more information to determine if the specification would be met. When this information was received, the apparent low bidder still did not submit an acceptable version of the check valves and was asked to resubmit with a valve that met specifications. This response was received early in February. The winning bidder was the Modon Group with a bid of \$1,408,536. The request for consent to subcontract has been submitted to USAID's contracting office.

Following the recommendation of CDM to award the source metering contract to Modon Group, the approval for consent to subcontract was received on March 8, 2012. The subcontract agreement is currently under preparation and a kick-off meeting with Modon group will take place in late April or early May. The implementation period of this activity is expected to last 18 months, until September 2013, including one year of maintenance service agreement, flow meters reading, and data collection.

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ALI	IVILV		eline

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Complete specifications of equipment. Start procurement of production meters, fittings.			100%									
Place subcontract for supply and installation of up to 218 production meters, fittings and protection boxes						25%						
Place orders. Start installation on site.									0'	%		$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

→ Activity continues in Year 4

# Activity 5.4 – Upgrading Water Analysis Laboratories

The LWWSS subcontractor Numelab has delivered all laboratory equipment to SLWE water analysis laboratories in Saida, Nabatieh, and Sour. The last piece of equipment as part of upgrading SLWE water analysis laboratories is the Atomic Absorption Spectrophotometer (AA), which was installed at the end of February. The vendor then provided a week-long training session for laboratory staff from March 5-9, 2012 on the operations and maintenance (O&M) of the AA.

Given that Numelab's training related to the strict O&M of the AA equipment, DAI facilitated a short training in March, 2012 that covered areas relating to the process of planning the testing over the course of the seasons, preparing test samples in advance, aligning the personnel and sequencing their operation, and the process of conducting each sample test and recording the findings. The training was conducted free of charge by an AUB expert, given that AUB is already deployed with DAI on LWWSS, implementing a major activity in BWE, and given that the AUB expert has been working on such equipment according to the Lebanese and US standards at the AUB campus for several decades.

# **Activity Timeline**

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012		A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Delivery of remaining laboratory equipment packages.			100%									
Installation and complete user training.	100%											
Service agreement and follow-up in place.						20%					$\rightarrow$	

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

→ Activity continues in Year 4

# Activity 5.6 - Increasing Information Systems Infrastructure Efficiency

As per the work plan, LWWSS will support SLWE in funding an IT hardware upgrade, including a server upgrade and associated equipment. This upgrade will maximize the performance of the existing ERP platform and enable SLWE to avoid incurring additional operational costs while it transitions the operation of its ERP solution from an outsourced market supplier to an in-house team.

During this quarter, LWWSS' Systems and Services Manager Ahmad Siddik met with the SLWE IT Specialist to assess the existing JD Edwards hardware. Mr. Siddik developed specifications for the equipment, and quotations for the hardware procurement will be sought in April. The IT equipment will most likely be delivered and installed in June or July.

# **Activity Timeline**

Activity Progress	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity 1 logicss	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Finalize specifications, start procurement for server upgrades.					50	<b>)</b> %						
Upgrade server installation and other key IT infrastructure at head office.										0%		$\rightarrow$

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

→ Activity continues in Year 4

# Component 6: Small- to Medium-Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

#### **Work Plan Activities**

Item	Activity Description
6.3	Upgrading Pumping and Energy Efficiency
6.3.1	SLWE: Test and design pumps, motors and associated works for

Program Resource
- CDM (BG, GT, EH) - Local

Deliverable by End of Year Three	Timeframe
- Design Produced and Approved by	Sep, 2012

	the rehabilitation of selected stations	subcontractor (TBD)	SLWE	
6.3.2	SLWE: Supply and install pumps, motors and associated works for the rehabilitation of selected stations	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Activity planned	Sep, 2012
6.3.3	Establish service agreements, and conduct user training programs for the above activities	- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)	- Activity planned	Sep, 2012

Activity 6.3 – Upgrading Pumping and Energy Efficiency

# Rehabilitation of Pump Stations

There has been a delay in starting the work in SLWE based on SLWE Director General's request to change the scope of work that was originally proposed. To accommodate the demand-driven change, LWWSS was obligated to submit an approval request for the USAID Contracts Office to approve the change in scope. The change in scope was to rehabilitate up to five major pump stations as opposed to the original proposal of providing pumps and motors for up to 40 single-well pump stations. LWWSS submitted the request to change the scope of work and received concurrence in February.

This activity is part of the add-on to LWWSS that commenced on October 1, 2011.

After concurrence was received from USAID in February to change the scope of work from rehabilitating 40 single-well pump stations to rehabilitating five major pump stations, LWWSS subcontractor CDM completed the evaluation of four proposals received from engineering companies and recommended to award the contract for engineering services to Design Engineering Partners (DEP). DAI contracting officer consent to subcontract with DEP is under preparation and will be sent to the USAID contracts office for approval in May.

# Activity Timeline

Activity Progress	O 2011	N 2011	D 2011	J 2012	F 2012	M 2012	A 2012	M 2012	J 2012	J 2012	A 2012	S 2012
Investigation project, draft SOW, launch RFP, obtain bids for local subcontractor to CDM, for design services			100%									
Conduct evaluation of RFPs, interviews, and appoint engineering subcontractor						50%						
Start design stage and issue completed design package for SLWE review								0%		$\rightarrow$		

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012 (0% indicates that the activity has not yet started)

Activity continues in Year 4

 $\rightarrow$ 

#### Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

# **Work Plan Activities**

Item Activity Description

Program
Resource

Deliverable by
End of Year
Three

Timeframe

7.6	Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation			
7.6.2	Water awareness campaigns on 2012 World Water Day	EMC (NA) Local subcontractor (TBD)	Activity completed	April, 2012

Activity 7.6 - Implementing Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation

LWWSS Outreach and Customer Service Specialist Nada Akl coordinated with Nidal Hashisho, Head of Customer Service and Communications at the SLWE, in planning activities for World Water Day 2012 and activities were implemented in two schools in Saida – Doha School (88 students) and Rafik Hariri High School (206 students). Nada Akl will be presenting two more sessions in April at the Doha school.

#### **Activity Timeline**

Activity Drogram	0	N	D	J	F	M	Α	M	J	J	Α	S
Activity Progress	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012
Identify target audience, prepare awareness material and brief all stakeholders					100%							
Conduct interactive activity, record impacts and report to USAID						75%						

Activity schedule, as per Year 3 Workplan, detailing percentage completion as of March 31, 2012

#### E. COLLABORATION WITH DONORS AND GOL OFFICIALS

Donor coordination is an essential part of LWWSS project planning and execution in order to (1) avoid unnecessary duplication, (2) identify specific areas of coordination and (3) identify areas where LWWSS can collaborate with other donors on specific projects or programs. The list of meetings with the GOL and other donors below provides a clear picture of this important program activity.

Meeting with Donor or GOL Official	Date	Attendees	Brief Synopsis of Meeting
CDR	February 22, 2012	Jimmy Zammar; Bassam Jaber and Josef Karam	Brief data gathering meeting relative to the Beka'a wastewater Systems
USAID	March 8, 2012	Sam Coxson, Madeleine Meek	Training on the USAID Tracker system
MOEW Donors Meeting	March 14, 2012	Sam Coxson	General information sharing about donor programs

#### F. USE OF FUNDS DURING THE QUARTER

#### G. CONTRACT DELIVERABLES

Quarterly Report for first guarter of year three

# H. CHALLENGES, PROBLEMS, ISSUES

# Capacity Building

LWWSS continues to encounter difficulty and delays in confirming training candidates, especially in critical areas such as financial operations and pump station operations. One problem is that many financial department employees are contract employees of a subcontractor to the WEs and not full-time regular employees. Selecting only full-time employees is the correct approach, but finding employees that can be allowed to miss work for even short periods of time makes the search and training more difficult and time consuming. In some cases, the personal contract employee may be trained if he or she has been in the position for a long period and has a good chance of being nominated to a full-time position.

LWWSS is mitigating this challenge by extending the time frames for training and training smaller classes, resulting in less work flow disruption while accomplishing the training for targeted WE employees.

#### I. MAJOR ACTIVITIES PLANNED FOR NEXT QUARTER

#### BWE Water Establishment Activities

- 2.2 Continuation of the water quality management program with completion of the on-site inspections and a summary report and recommendations for water testing throughout the Beka'a.
- 2.3 Preparations for pump station operations and maintenance advanced training is anticipated to begin in June.
- 3.1 Continued work with BMLWE and BWE on the ERP system implementation; in the BMLWE we expect to start the "go live" phase of system implementation; BWE will be later in the year based on progress made in tailoring the system to departmental needs.
- 3.2 Continuation of the FAS changes to accommodate the ERP implementation for the BWE to include year end balances (starting balances for new year as well), cost center determinations and forms and formats for internal and external reporting; installation of the time attendance machines completed
- 3.3 Determination of the next steps relative to the wastewater plant sustainability, possibly bringing a WE and a municipality together to facilitate the negotiation of a service agreement relative to sewer collection network operations and maintenance, operations and maintenance of a wastewater treatment plant that includes specifications on cost sharing.
- 4.4 Continue the process of developing a water, wastewater and irrigation master plan for BWE. In the subsequent quarter LWWSS should complete the RFP process and select a successful bidder for the master plan and begin the master plan data collection effort.
- 5.4 Continued development of the water quality baseline and recommended protocols to be used in test collection and in laboratory procedures. In the next quarter the baseline will be completed

(developed from the wet and dry seasons) and protocols for collection and lab procedures in draft form.

- 5.5 Continued chlorination system site visits, provision of chlorine and system operation checks as well as remedial training, if needed.
- 5.6 Upgrading IT equipment efficiency will continue for specific activities such as the internet connection between the branch offices and the head office.
- 5.8 The final hand over of the customer service center will happen in late April. An event to commemorate the completion of the customer service center is scheduled for June.
- 6.1 LWWSS will continue to work on the Zahle branch water lines replacement. Advertisement for and selection of a consulting firm to do the design, specifications and assist in the advertisement for a construction firm will be carried out. LWWSS anticipates design completion and bid specifications completed by the end of the fourth quarter of year three.
- 7.3 Completion of the customer service forms and printing for use at the opening of the Zahle customer service branch.

#### Beirut-Mt. Lebanon Water Establishment

- 3.1 Completion of the accounting system remaining questions and the "go live" exercise
- 3.2 Full integration will be reflected in the "go live" exercise; problems encountered will be resolved
- 5.2 Jeita pump station procurements will be in shipment to Lebanon; preparatory works at Jeita will be underway or completed. LWWSS anticipates that the pumps and motors will arrive before the valves and fittings. The motor control centers will arrive near the time of the motors and pumps. However, the order of installation is valves and then fittings, motor controls, and finally the pumps and motors.
- 7.2 The customer relations management module of the ERP will be the next to be tailored to the BMLWE department's needs and training provided to staff for its operation. LWWSS outreach and customer relations specialist Nada Akl will work with the EDM and BMLWE CRM teams to ensure progress in the CRM implementation stage.

#### North Lebanon Water Establishment

- 2.3 Continuation of pump station operator training by providing advanced operator training
- 3.1 Provide an assessment of the accounting cost centers and recommendations on their amendment to permit more effective analysis. This analysis is intended to be limited to the analytical accounting issues of the NLWE system and the entire IT system.
- 5.2 LWWSS will continue its work on the NLWE submersible pump replacement program in the next quarter by (1) determining the number of pumps to be procured and (2) designing and developing specifications for procurement and procure the pumps. Subsequent quarters will involve the manufacture and delivery of the pumps and their installation.
- 5.3 LWWSS will continue the procurement of the NLWE standby generators based on the priority list provided by the NLWE. The procurement and installation is anticipated to be complete or nearly complete during the next quarter.

- 6.1 LWWSS will continue with the gathering of information and preparation of an RFP for engineering consulting services for the Beit Mallat project. It is anticipated that the firm will be hired and well along on the data confirmation process as a part of design and specifications development for construction contract bidding.
- 7.3 LWWSS staff will work with NLWE staff on the WE corporate website
- 7.6 LWWSS staff will continue the school outreach program in the Tripoli and Koura areas during the next quarter.

#### South Lebanon Water Establishment

- 4.1 The business plan rewrite to accommodate the adoption of the National Water Sector Strategy (NWSS) is nearly complete. The difficulties encountered have been to align the WE level policies and practices with that of the newly adopted national strategy which also entailed reworking all the financial analysis and planning. This has been done and the process of confirming numbers in nearly complete. Once the data is confirmed the business plan can be re-reviewed and adopted by the WE board for submission to the MOEW. This is anticipated to take place during the next quarter.
- 4.2 CADRE is expected to complete all pump station inventories by the end of next quarter.
- 5.1 Source Metering will get underway in this quarter. The successful bidder, Modon, will be able to start by mid-May.
- 5.3. The only continuing aspect of the laboratory equipment procurement for SLWE is the laboratory service agreement which extends until April, 2013.
- 5.6 LWWSS IT Specialist will finalize specifications for the hardware procurement to upgrade SLWE's server and will begin the procurement process.
- 6.1 LWWSS and CDM will appoint an engineering consulting firm to begin the design and bid specification package for the rehabilitation of up to five larger pump station in the SLWE. LWWSS anticipates appointing of the engineering consulting firm and work to be well underway during the next quarter.
- 7.6 LWWSS will continue its water conservation program in SLWE region schools during the next quarter (Doha school).

ANNEX 1: YEAR-THREE PRELIMINARY PMP REPORT ENDING THE SECOND QUARTER OF THE WORK PLAN YEAR

Objective/ Results	Indicator/Unit of Measure	Disaggr - egation	BLYe ar Value	2010 Target	2010 Actu al	2011 Target	2011 Actual	2012 Target	2012 Actual (interi m figures , as of Q2)	2013 Target	2013 Actual	Date DQA	Responsi ble for Indicator
AO: Improved water services for all in Lebanon	1. Number of people in target areas with access to improved drinking water supply as a result of USG assistance (F) 1	Gender <sup>2</sup>	0	Male 14,700 Femal e 15,300 Total- 30,000	0	Male 14,700 Female 15,300 Total- 30,000	Male 282,716 Female 294,256 Total – 576,972	Male 88,200 Female 91,800 Total- 268,200	Male - 353,74 2 Female - 368,17 9 Total- 721,92	Male 145,040 Female 150,960 Total- 296,000		12/20 10	COP
AO: Improved water services for all in Lebanon	2. Percent customer satisfaction with water services in targeted areas.	Gender	42 %	42%	42%	None	None	45%	(1)	48%			СОР
IR 1: More efficient water management	3. Percent of water revenues collected by targeted water entities	WE	47 %	48%	62%	53%	63%	56%	(2)	59%		12/20 10	COP

<sup>&</sup>lt;sup>1</sup>Indicators 1 and 6: People benefiting from multiple activities are only counted once. Numbers shown are cumulative.

<sup>&</sup>lt;sup>2</sup>The CIA Factbook lists the ratio of male to female population in Lebanon as 49% male and 51% female.

Objective/ Results	Indicator/Unit of Measure	Disaggr - egation	BLYe ar Value	2010 Target	2010 Actu al	2011 Target	2011 Actual	2012 Target	2012 Actual (interi m figures , as of Q2)	2013 Target	2013 Actual	Date DQA	Responsi ble for Indicator
Sub-IR 1.1: Improved capacity of water entities	4.Number of training activities provided to staff from water entities as a result of USG assistance	N/A	0	4	3	4	5	4	6	4		12/20 10	COP
Sub-IR 1.1: Improved capacity of water entities	5. Number Staff from Water Entities Trained as a Result of UGG Assistance	Gender	0	M-25 F-10 Total – 35	M-4 F-4 Total - 8	M-40 F-20 Total – 60	M-90 F-15 Total – 105	M-55 F-30 Total – 85	M-59 F-24 Total – 83	M-60 F-35 Total – 95		12/20 10	COP
Sub-IR 1.1: Improved capacity of water entities	6. Number of management systems and plans used at water management entities as a result of USG assistance	N/A	0	4	3	2	3	2	2	2		12/20 10	COP
Sub-IR 1.2: Increased participation of water users in water management	7. Number of water users trained on efficient water management*	Gender	0	M- 1,300 F-700 Total 2,000	0	M-1,300 F-700 Total 2,000	M- 81,438 F- 84,761 Total- 166,199	M-5,047 F-5,253 Total 10,300	M-168 F-176 Total 344	M-6,300 F-5,700 Total- 12,000		12/20 10	СОР
Sub-IR 1.2: Increased participation of water users in water management	8. Number of dialogue events held between stakeholders and water authorities as a result of USG assistance	N/A	0	3	2	2	4	2	3	2		12/20 10	COP

Objective/ Results	Indicator/Unit of Measure	Disaggr - egation	BLYe ar Value	2010 Target	2010 Actu al	2011 Target	2011 Actual	2012 Target	2012 Actual (interi m figures , as of Q2)	2013 Target	2013 Actual	Date DQA	Responsi ble for Indicator
IR2: Improved water infrastructure	9. Number of functioning water and wastewater facilities constructed or rehabilitated with USG assistance	Water Wastew ater	W-0 WW-0	W-0 WW-0	W-0 WW- 0	W-1 WW-0	W-1 WW - 0	W-10 WW-0	W-18 WW-0	W-1 WW-0		12/20 10	СОР
IR3: Enhanced water governance	10. Number of Proposed Legal, Regulatory and Policy actions to enhance Efficiency and Effectiveness of Water Entities as a result of USG Assistance	N/A	0	1	2	1	2	1	0	1		12/20 10	СОР
Sub-IR 1.1: Improved capacity of water entities	11. Number of participants attending regional water and wastewater utility study tours	Gender/ Type of Particip ant (Mgt., Supervi sory or Staff)	0	0	0	Supr-3 Staff-12 M-11 F-4 Total 15	(3) Supr – 1 Staff – 2 (M – 2, F – 1)	Supr- 3 Staff- 12 M-11 F-4 Total 15	(3) Supr- 0 Staff- 0 M-0 F-0	Supr-3 Staff-12 M-11 F-4 Total 15		12/20 10	СОР

#### Footnotes:

- (1) LWWSS will be conducting a Customer Satisfaction Survey in Q4 of Y3.
- (2) This number will not be available until Q2 of Y4, as the WE fiscal year ends on December 31<sup>st</sup>. In the subsequent second quarter report, LWWSS will be able to report this metric for the end of year three.
- (3) Attendance at out of country seminars and conferences is not supported by the Minister of Energy and Water. Although not stated as a policy decree, the Minister has refused to let directors general and key staff at the MOEW attend seminars and conferences out of Lebanon. LWWSS will continue to press for

attendance of directors general and other key staff out of the country on a very selective basis and focus more on lower level staff and possibly bringing specialists into Lebanon to conduct training similar to that received at out of Lebanon seminars and conferences.